

CLAIMS

1. **A polarizer composed of a film comprising a structure in which fine metallic particles is dispersed in a polymer matrix,**

5 **wherein a polymer forming the polymer matrix is a translucent polymer having a transmittance of 88% or more when measured thereof with a thickness of 1 mm and the film is uniaxially stretched.**

10 **2. The polarizer according to claim 1, wherein a domain formed with fine metallic particles has an average particle diameter of 100 nm or less and an aspect ratio (a ratio of a maximum length/a minimum length) of 2 or less.**

15 **3. A fabrication method for the polarizer according to claim 1 or 2, comprising steps of: forming a film with a mixed solution comprising fine metallic particles obtained by dispersing fine metallic particles in a solution containing a translucent polymer having a transmittance of 88% or more when measured 20 thereof with a thickness of 1 mm and thereafter, uniaxially stretching the film.**

4. A polarizer in which fine metallic particles is dispersed in a matrix formed with a liquid crystalline material.

5. The polarizer according to claim 4, wherein the liquid
crystalline material is uniaxially aligned.

6. The polarizer according to claim 4 or 5, wherein the
5 liquid crystalline material is a liquid crystal polymer.

7. The fabrication method for the polarizer according to
any of claims 4 to 6, comprising step of: forming a film with a
mixed solution obtained by dispersing fine metallic particles in a
10 solution containing a liquid crystalline material.

8. A polarizer having an absorption spectrum with an
absorption peak at a given wavelength, measured when polarized
light incidences thereon,

15 wherein if an azimuth of an incident polarization plane is
altered relative to the polarizer, the absorption peak wavelength
shifts in accordance with an alteration in the azimuth.

9. A polarizer in which in a case where an azimuth of the
20 incident polarization plane relative to the polarizer is altered, if
an azimuth of the incident polarization plane is 0 degree when
an absorption peak wavelength of an absorption spectrum that is
measured is the longest wavelength, which is referred to as λ_1 ,
by definition,

25 if an azimuth of the polarization plane is gradually

increased from 0 degree, a value of the absorption peak wavelength shifts to the short wavelength side in accordance with the increase and

when an azimuth of the incident polarization plane is 90 degrees, a value of the absorption peak wavelength is the shortest wavelength, which is referred to as λ_2 , by definition.

10. The polarizer according to claim 9, satisfying a relation of $(\lambda_1 - \lambda_2) = 10$ to 50 nm.

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11. The polarizer according to any of claims 8 to 10, the polarizer is a film in which fine metallic particles are dispersed in an organic matrix having a birefringence in the film plane.

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12. The polarizer according to claim 11, wherein the organic matrix is formed with a polymer matrix, a polymer forming the polymer matrix is a translucent polymer having a transmittance of 88% or more when measured thereof with a thickness of 1 mm, and the film is a uniaxially stretched.

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13. The polarizer according to claim 11, wherein the organic matrix is formed with a liquid crystalline material.

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14. The polarizer according to claim 13, wherein the liquid crystalline material is uniaxially aligned.

15. The polarizer according to claim 13 or 14, wherein
the liquid crystalline material is a liquid crystal polymer.

5 16. The polarizer according to any of claims 11 to 15,
wherein a domain formed with fine metallic particles has an
average particle diameter of 100 nm or less and an aspect ratio (a
maximum length/a minimum length) is 2 or less.

10 17. A polarizing plate in which a transparent protective
layer is provided on at least one surface of the polarizer
according to any of claims 1, 2, 4 to 6 and 8 to 16.

15 18. An optical film comprising at least one polarizer
according to any of claims 1, 2, 4 to 6 and 8 to 16 or the
polarizing plate according to claim 17 as a laminate.

20 19. An image display comprising at least one polarizer
according to any of claims 1, 2, 4 to 6 and 8 to 16, the polarizing
plate according to claim 17 or the optical film according to claim
18.